

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. (Currently amended): A laser working apparatus for effecting optical ablation working by irradiating a work article with a laser light with a pulse emission time not exceeding 1 picosecond from a laser oscillator capable of continuos emission of a light pulse of a large energy density in space and in time, with [a] the pulse emission time not exceeding 1 picosecond, the laser working apparatus for effecting optical ablation working comprising:

a light intercepting control means, disposed in a light path of laser light with the pulse emission time not exceeding 1 picosecond from the laser oscillator to the work article, for selecting a state where the laser light with the pulse emission time not exceeding 1 picosecond can be irradiated to irradiate the work article or a light intercepting state where the laser light with the pulse emission time not exceeding 1 picosecond cannot be irradiated to the work article,

wherein said light intercepting control means is heated by receiving irradiation of laser light with the pulse emission time not exceeding 1 picosecond at the light intercepting state,

wherein the laser light, irradiating to and absorbed by said light intercepting control means, with the pulse emission time not exceeding 1 picosecond does not reach an ablation threshold value of energy density at which the work article is worked

wherein control means for controlling the irradiation of said laser light is provided in a position not affecting the temperature control of said laser oscillating

portion and a configuration is provided for controlling the irradiation of the laser light continuously emitted from said laser oscillator by said control means thereby effecting optical ablation working on the work article.

2. (Currently amended): A laser working apparatus according to claim 1, wherein said light intercepting control means is provided outside the laser oscillator or in a chamber separate from a laser oscillation chamber in the laser oscillator.

3. (Currently amended): A laser working apparatus according to claim 1 or 2,

wherein said light intercepting control means ~~is comprises~~ a light intercepting device capable of transmitting or intercepting ~~said~~ laser light, and a configuration is provided for irradiating the work article with a predetermined number of pulses by ~~said the~~ light intercepting device thereby effecting optical ablation working.

4. (Currently amended): A laser working apparatus according to claim 3, wherein ~~said the~~ light intercepting device is arranged by an electromagnetic mechanical chopper.

5-10. (Canceled)

11. (Currently amended): A laser working apparatus according to claim 1 or 2,

wherein said light intercepting control means is arranged by a light interception control device capable of repeating the transmission and interception of the

transmitting light with a frequency smaller (or a period longer) than that of the consecutive light pulses emitted from ~~said~~ the oscillator, and a configuration is provided for irradiating the work article with the consecutive light pulses at a predetermined interval by ~~said~~ the light interception control device, thereby effecting optical ablation working.

12. (Currently amended): A laser working apparatus according to claim 11, wherein ~~said~~ the light interception control device is arranged by a mechanical rotary chopper.

13. (Currently amended): A laser working apparatus according to claim 12, wherein the time ratio of transmission and interception of the light by ~~said~~ the mechanical rotary chopper is set by the shape of a shielding plate of ~~said~~ the mechanical rotary chopper.

14-34. (Canceled)

35. (New): A laser working apparatus according to claim 1, wherein the light path reaches the work article from the laser oscillator through a photomask illuminating optical system, a photomask and a photomask pattern projection imaging lens, and

wherein said light intercepting control means is disposed between the laser oscillator and the photomask illuminating optical system.

36. (New): A laser working apparatus according to claim 1, wherein said light intercepting control means is provided with cooling means

for cooling a portion heated by receiving irradiation of laser light with the pulse emission time not exceeding 1 picosecond at the light intercepting state.

37. (New): A laser working apparatus according to claim 36, wherein the cooling means is a gas blowing member for blowing gas to the heated portion.